

Donald D. Van Slyke

OF THE ACADEMY MEDAL TO DONALD D. VAN SLYKE

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Tr is a great joy for me to give the citation in connection with the award of the Academy's medal for outstanding contributions to medical science to Dr. Donald D. Van Slyke. In the early 1920's, as a young, comparatively unknown organic chemist, I was sent by Dr. Simon Flexner, who was the organizer and Director of the Rockefeller Institute (now the Rockefeller University), from its laboratories to its hospital to learn enough biochemistry from Dr. Van Slyke to qualify for a position elsewhere. Learn biochemistry I did, first as a member of the Van Slyke-Hastings-Stadie-Neill team that studied the oxygen-binding and other properties of hemoglobin, then by absorption as I watched the Van Slyke blood-gas apparatus develop from a hand-shaken glass contraption into the beautiful precision machine it soon became, not only for the accurate measurement of the bloodgases, but also for amino nitrogen and many other vitally important determinations urgently needed in clinical medicine and in general chemical science. During those latter four years, in which I was really working with Dr. Oswald T. Avery, not once did Van, as we all affectionately called him, hint that he might have other and perhaps better uses for the considerable fraction of his none-too-large laboratory footage that I occupied. During this period Van also developed his quantitative theory of buffer action, and I shall never forget my consternation, tempered with flattered pleasure, when he brought around copies of the finished paper to us junior co-workers for constructive critical comment. It took me weeks to recover enough of my long-unused

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calculus to follow through intelligently to the end.

Donald Dexter Van Slyke was born in Pike, N. Y., in 1883, Christening with double letters seems to have been a family habit, for Van's father was Lucius L. Van Slyke, an amiable, bewhiskered gentleman who was head of the Experiment Station at Geneva, N. Y., and who obviously took great pride in his son on his visits to the Rockefeller Institute, where Van had become chemist to the Hospital in 1913. Although trained as an organic chemist, with finishing touches on amino acids under Emil Fischer in Berlin. Van soon became an excellent clinician. For this I have the word of Dr. Edgar Stillman, who was for many years on another of Van's teams studying kidney function, metabolic diseases, and connective tissues. Since 1048, when he became an emeritus member of the Rockefeller Institute. Van has been senior scientist and guest investigator at the Brookhaven Laboratories and has been in charge of clinical chemistry in its large hospital as well. In his spare time from these duties he is writing a book on the manometric methods he did so much to develop.

Van, of course, has been the recipient of numerous awards, honorary degrees, presidencies of scientific societies, and honorary memberships in foreign academies and societies. I shall not bore you with the long list, which you will find in Who's Who and in American Men of Science, but shall single out only two which, I hope, gave Van as much joy and pleasure and stimulation as they did those of us who also had the privilege of participating in these events:

One example was the Honorary Presidency of the International Congress of Clinical Chemistry in Stockholm in 1957, at which biochemists from all over the world did honor to him, and the other was the *Symposium on Chemistry in Medicine* held at Brookhaven, N. Y., in 1963 on the occasion of Van's 80th birthday, at which his patience and endurance put to shame many of his younger colleagues.

And now we happily and affectionately add one more honor to the long list: namely, the Academy's medal, with the hope that your "outstanding contributions to medical" and biological science will continue well into the next decade of your rich and busy life.